BASEL UNIVERSITY RELIES ON RED HAT DIRECTORY SERVER FOR AUTHORISATION AND AUTHENTICATION

FAST FACTS	
Industry	Education
Geography	Switzerland
Opportunity	Replace two obsolete OpenLDAP servers to guarantee a greater level of reliability
Migration Path	Fedora to Red Hat Enterprise Linux
Software	Red Hat Enterprise Linux, Red Hat Directory Server
Hardware	Three servers with 3 GHz Intel Dual Core Xeon processors, each with 4 GB RAM and each with 2 x 76 GB SAS hard disk drives, distributed to two server rooms.
Benefits	Increased reliability, ensured stability at peak access times, enabled monitoring and failover functionality, enabled the modification of configuration during operation

UNIVERSITÄT BASEL

BACKGROUND

Basel University was founded in 1460 and is the oldest university in Switzerland. Throughout its 500-year history, it has always been a forward-looking institution in terms of research, teaching, and internal organisation. The university's attractiveness as a place to study and quality of offered courses are subject to its ability to take on new developments and subjects and make these accessible to students and teaching staff alike. The task of the university's IT Department is to provide its 15,000 IT users with permanent access to the corresponding electronic resources. This also includes ensuring that students can access both the University's database and its archives.

"Our primary considerations were stability, availability, and support, so the switch to Red Hat Directory Server was a logical next step."

—Bernd Sindlinger,
Project Manager of Basel University's Computer Centre

OPPORTUNITY

In 2007, the team headed up by Professor Dr. Fritz Rösel, Head of IT at Basel University, made plans to replace the existing OpenLDAP servers, which provide user-access control to services on the network. The existing servers ran on the Fedora Linux distribution in a master/slave configuration that could not provide the reliability and availability necessary for the university's systems.

"Our directory is a central component and one of the most important services of our infrastructure. Because of its importance, we needed the commercial support of a reliable source, like Red Hat," said Bernd Sindlinger, Project Manager of Basel University's computer centre.

SOLUTION

In search of reliability and strong support, Basel University turned to Red Hat solutions. "We had been intending to set up another Fedora Directory Server, but then we decided to implement Red Hat Directory Server because we didn't want to go without the support that could be provided by Red Hat," said Sindlinger.

For preliminary planning and conception of the Red Hat implementation, the university contracted the services of an external consultant, Jens Kühnel, a professional consultant who specialises in open source and directory servers. Throughout the entire testing and installation phase of Red Hat Directory Server, Kühnel supported the university, providing both advice and practical assistance.

After a short evaluation phase, the IT department began installation of the production system. The required measures were worked out and prepared during a three-day feasibility workshop with Kuhnel's external expertise. Simultaneously, a necessary tweak to the directory structure involving an installation and adjustment period of around 10 days was completed.

The complete solution combines Red Hat Directory Server, running on Red Hat Enterprise Linux onthree servers with 3 GHz Intel Dual Core Xeon processors, each with 4 GB RAM and 2 x 76 GB SAS hard-disk drives, distributed to two server rooms.

"By using multimaster replication and installing a load distribution system, monitoring, and failover functionality, the Red Hat Directory Server solution meets our requirements," said Sindlinger.

BENEFITS

After completion of the university's initial implementation phase, there are 15 running server services and a large number of applications accessing the directory, including e-mail services, SAP, practical training rooms, web applications, and file servers. In addition, Red Hat Directory Server now guarantees the desired high-degree availability needed to support the university's IT systems.

Since installing Red Hat solutions, administrative costs for Basel University have been considerably reduced in comparison with its previous OpenLDAP solution. In addition, the university also has the reliability of Red Hat's professional support to leverage in the event of a problem or query.

"The ability to apply central management to the entire Directory Server environment is one of the greatest benefits we have gained with our migration to Red Hat Directory Server," said Sindlinger. "It was also extremely helpful for our users to experience complete transparency during implementation."

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